## MAJOR CHEMICAL EMERGENCIES

In the event of a major chemical emergency, you will be notified by the authorities. A siren could sound, you may be called by telephone or emergency personnel may drive by and give instructions over a loudspeaker. Officials might even come to your door.

Learn more about your risk of chemical emergencies by contacting your local poison control center, local authorities on hazardous materials, the Environmental Protection Agency, your local emergency manager or local American Red Cross chapter.

#### **Awareness Information**

You may be exposed to a chemical even though you may not be able to see or smell anything unusual. You may be exposed in three ways:

- Breathing the chemical
- Swallowing contaminated food, water or medication
- Touching the chemical or coming into contact with clothing or things that have touched the chemical

#### **Planning Ahead**

Learn about your community's risk of major chemical emergencies. Contact your emergency management agency or American Red Cross chapter for information about chemical plants and hazardous material transportation routes in your area.

Find out evacuation plans for your workplace and your children's schools. Different locations have different plans. Know where you or your children may be taken in the event of a major chemical emergency.

Develop an evacuation plan. Everyone in your family should know where to go if they have to leave. Trying to make plans at the last minute can be upsetting and create confusion.

Learn about industry and community warning signals. Different communities may have different ways of providing warnings. Many communities have sirens intended for outdoor warning purposes. Use a NOAA weather radio with a tone-alert feature to keep you aware of warnings while you are indoors.

Discuss chemical emergencies with your family. Everyone should know what to do in case all family members are not together. Discussing major chemical emergencies ahead of time helps reduce fear and anxiety and lets everyone know how to respond.

Assemble a Disaster Supplies Kit.

# What to Do During a Major Chemical Emergency

If you hear a siren or other warning signal, turn on a radio or television for further emergency information. You will be notified of a major chemical emergency by the authorities. To get your attention, a siren could sound, you may be called by telephone, or emergency personnel may drive by and give instructions over a loudspeaker. Officials might even come to your door. Listen carefully to the radio or television. The Emergency Alert System (EAS) may be activated. You will be given specific instructions for your particular situation.

Strictly follow instructions. Your life could depend on it.

You will be told the following:

- The type of health hazard
- The area affected
- How to protect yourself
- Evacuation routes (if necessary)
- Shelter locations
- Type and location of medical facilities
- The phone numbers to call if you need extra help

Call EMS, 9-1-1 or the operator only for a possible life-threatening emergency. Telephone lines are frequently overwhelmed in disaster situations. They need to be clear for emergency calls to get through.

#### What to Do if You Are at the Scene of a Chemical Accident

Call 9-1-1 or the local fire department as soon as possible to report the nature and location of the accident. Alerting local authorities to a major chemical emergency immediately may help reduce potential injury or damage.

Move away from the accident scene and help others away. Minimizing the time you are exposed reduces your risk of injury from breathing toxic chemicals. Some chemicals may ignite or explode.

Stay away from the spilled substance and avoid touching it. If you are not sure of a substance or its effects, wait for authorities on the scene to advise you of proper medical care or attention to minimize injury.

Try to avoid inhaling gases, fumes or smoke. If possible, cover your mouth with a cloth while leaving the area. Many chemicals can damage breathing passages.

Stay away from accident victims until the hazardous material has been identified. Once a substance has been identified and authorities indicate it is safe to go near victims, you can move victims to fresh air and call for emergency medical care. Remove contaminated clothing and shoes and place them in a plastic bag. Cleanse victims who have come in contact with chemicals by immediately pouring cold water over the skin or eyes with running water for at least 15 minutes, unless authorities instruct you not to use water on the particular chemical involved. Minimizing your exposure will decrease potential injury.

Try to stay upstream, uphill, and upwind of the accident. Chemicals may be carried by water, gravity, or wind. Minimize your exposure.

# How to Shelter-in-Place

One of the basic instructions you may be given in a chemical emergency is to shelter-in-place. This is a precaution aimed to keep you and your family safe while remaining in your home. If you are told to shelter-in-place, go inside, close all windows and vents and turn off all fans, heating or cooling systems. Take family members and pets to a safe room, seal windows and doors, and listen to local radio (or television) stations, or a NOAA Weather Radio for instructions.

While gathering your family, you can provide a minimal amount of breathing protection by covering your mouth and nose with a damp cloth. Many chemicals can cause damage to breathing passages.

Immediately after the shelter-in-place announcement is issued, fill up bathtubs or large containers for an additional water supply, and turn off the intake valve to the house. Water supplies may become contaminated. Preserve the water you have available.

If gas or vapors could have entered the building, take shallow breaths through a cloth or a towel. Many chemicals can cause damage to breathing passages.

Avoid eating or drinking any food or water that may be contaminated. Injury may occur from eating or drinking toxic chemicals.

Seal the house so contaminants cannot enter.

- Close and lock all windows and doors in your home.
- Turn off all fans, heating and air conditioning systems.
- Close the fireplace damper.
- Seal gaps and cracks under doorways and windows with wet towels and duct tape.
- Seal gaps around window and air conditioning units, bathroom and kitchen exhaust fans and stove and dryer vents with duct tape and plastic sheeting, wax paper or aluminum wrap.
- Close off nonessential rooms such as storage areas, laundry rooms, and extra bedrooms.
- Turn off ventilation systems.

Go to an above-ground room (not the basement) with the fewest windows and doors. Some chemicals are heavier than air and may seep into basements, even if the windows are closed.

Take your Disaster Supplies Kit with you. These items may make you more comfortable while you are waiting for further instructions.

Stay in the room and listen to your radio or television until you are told all is safe, or you are told to evacuate. Local officials may call for evacuation in specific areas at greatest risk in your community. Following the advice of local authorities is your safest choice.

If you are told there is danger of explosion, close the window shades, blinds or curtains. To avoid injury, stay away from the windows. If windows break due to the explosion, the shades will help prevent glass from shattering into your home.

## **Evacuation during a Chemical Emergency**

If you are told to evacuate immediately, take your Disaster Supplies Kit. Pack only the bare essentials such as medications, and leave your home quickly. Follow the route authorities recommend. Don't take shortcuts on the way to the shelter - they may be blocked or expose you to dangerous chemicals.

It is important to stay calm, listen carefully and follow all instructions. Authorities will decide if evacuation is necessary, based primarily on the type and amount of chemical released and how long it is expected to affect an area. Other considerations are the length of time it should take to evacuate the area, weather conditions and the time of day. Authorities will advise you of the safest steps to take for your particular situation.

If an evacuation order is issued, listen to your radio to make sure the evacuation order applies to you, and to understand if you are to evacuate immediately or if you have time to pack some essentials. Stay tuned to a radio or television for information on evacuation routes, temporary shelters, and procedures. Following the advice of local authorities is your safest choice.

Avoid using the telephone. Use your phone only in life-threatening emergencies, and then call the poison control center, EMS, 9-1-1 or the operator immediately. Telephone lines are frequently overwhelmed in disaster situations. They need to be clear for emergency calls to get through. If you are told to evacuate, do so immediately. Local officials may call for evacuation in specific areas at greatest risk in your community. Following the advice of local authorities is your safest protection.

Take your Disaster Supplies Kit. These items may make you more comfortable while you are away from home.

Only if you have time, seal your house so contaminants cannot enter:

- Shut off all vents.
- Close fireplace dampers.
- You don't need to turn off your refrigerator or freezer, but you should turn off all other appliances and lights as you leave.
- Close and lock your windows and doors.

Move quickly and calmly. Leaving the area as quickly as possible will reduce your chance of exposure to hazardous materials. Staying calm and rational will help you move safely and avoid delays or accidents caused by irrational behavior.

Do not assume that a shelter will have everything you need. While shelters provide a safe place to stay and food, specialty items for infants and individuals on restricted diets may not be available. In most major chemical emergencies, shelters will provide only emergency items such as meals, cots and blankets.

If you need a ride, ask a neighbor. If no neighbor is available to help you, listen to local radio or television stations for further instructions.

Check on neighbors to make sure they have been notified, and offer help to those with disabilities or other special needs. Elderly people and people with disabilities may require additional assistance, and people who care for them or who have large families may need assistance in emergency situations.

Take only one vehicle to the evacuation site. Traffic may be very heavy and parking at a shelter may be limited. Reduce further congestion and keep your family together by eliminating additional vehicles.

Close your car windows and air vents, and turn off the heater or air conditioner. Many chemicals can cause damage to breathing passages.

For your safety, follow the exact route you are told to take. Shortcuts may put you in the path of danger.

# What to Do After a Major Chemical Emergency

Return home only when authorities say it is safe. Local officials on the scene are the best source of information for your particular situation.

Follow local instructions concerning the safety of food and water. Contaminated food or water can cause illness.

Clean up and dispose of residue carefully. Follow instructions from emergency officials concerning cleanup methods. Local officials will best know proper procedures for your particular situation.